

Remarks

Claims 1-33 were pending in this Application. Claims 1-2, 4, 6-11, 25-27, and 29-33 were elected in a response to Election/Restriction Requirement filed on January 3, 2008. Claims 1-2, 4, 6-11, 25-27, and 29-33 stand rejected on arguments laid out in the non-final Office Action mailed April 11, 2008.

In the present Amendment, language in claim 1 is amended to clarify the nature of the expression vector and mammalian Na_v1.9 sodium channel protein or a fragment thereof. Claims 29, 30, and 33 have been amended such that they are formatted as proper independent claims.

Solely in order to focus prosecution of the currently pending case, applicant has canceled non-elected subject matter and has amended claims 1 and 25 to recite a human Na_v1.9 sodium channel protein or fragment thereof, consistent with Applicant's election of Group II in the previously filed response to Restriction Requirement. Claims 2 and 26 have been cancelled without prejudice, and claims 6 and 27 have been amended to reflect amended claim dependencies. Therefore, claims 1, 4, 6-11, 25, 27, 29-33 are currently pending.

Applicant submits that no new matter is added by these amendments.

Rejection under 35 U.S.C. § 102(b)

Claims 1-2, 4, 6-11, 25-27, and 29-33 were rejected as being allegedly anticipated by Dib-Hajj *et al.* (WO 2001/05831) (hereafter referred to as “Dib-Hajj *et al.* (2001)”).

The claimed invention is directed to expression vectors comprising nucleic acids encoding human Na_v1.9 sodium channel proteins or fragments, “wherein the human Na_v1.9 sodium channel protein or fragment thereof *produces a sodium current* after the expression vector is transfected in a cell.” (emphases added).

Dib-Hajj *et al.* (2001) only disclose a partial sequence for human Na_v1.9 (see Figure 8), and provide no teaching or suggestion that such partial sequence can be expressed in cells, let alone can encode a sodium channel or fragment thereof that produces a sodium current. Dib-Hajj *et al.* (2001) therefore cannot anticipate the claimed invention.

For all these reasons, the rejection under 102(b) must be removed.

Rejection under 35 U.S.C. § 102(e)

Claims 1-2, 4, 6-11, 25-27, and 29-33 were rejected as being allegedly anticipated by Dib-Hajj *et al.* (US 6,573,067) (hereafter referred to as “Dib-Hajj *et al.* (2003)”).

Dib-Hajj *et al.* (2003), similar to Dib-Hajj *et al.* (2001), disclose only a partial human sequence and also provide no teaching or suggestion that such partial sequence can be expressed in cells, let alone can encode a sodium channel or fragment thereof that produces a sodium current. Dib-Hajj *et al.* (2003) therefore cannot anticipate the claimed invention.

For all these reasons, the rejection under 102(e) must be removed.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance. A Notice to that effect is earnestly solicited. Please charge any necessary fees or credit any overpayments to our Deposit Account No. 03-1721.

Respectfully submitted,

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